

ral cavity of the *Crinoidea*, and which serve for the insertion of their rays. In fact there is nothing in these animals which can be compared to a bason, to costal or intercostal pieces, to a shoulder blade, to arms, to a hand, to fingers, to tentacula, to a clavicle, to pectoral or capital plates, and which would justify the use of these terms to designate simple calcareous plates similar to those of the *Echinus* and Starfish, disposed even in general, as in those two families, and offering no other differences than the following; namely, that at the dorsal surface a certain number of plates is developed one upon the other, which form a pedicel more or less long and moveable; that the principal cavity of the animal is surrounded at its sides by laminæ varying much in number and in form in the different genera, and arranged very diversely around the mouth; and lastly, that the rays which depart from the central disc ramify in various ways. In order to simplify the names generally so very long which have been given to the genera of the family of the *Crinoidea*, I have everywhere changed the termination *crinites* into *crinus*, as M. de Blainville had previously done for some of them.

L.—*Descriptions of British Chalcidites.* By FRANCIS WALKER, F.L.S.

[Continued from p. 387.]

Sp. 16. *Cirrospilus Lycophon*, Fem. *Cupreus*, *antennæ nigræ*, *pedes virides flavo-cincti*, *alæ limpidæ*.

Obscure cupreus: oculi et ocelli rufi: antennæ nigræ; articulus 1<sup>us</sup> æneus: abdomen cupreum, basi micans: pedes virides; trochanteres fuscii; genua albida; tarsi fulvi, apice fuscii: alæ sublimpidæ; squamulæ piceæ; nervi fulvi. (Corp. long. lin.  $\frac{2}{3}$ — $\frac{3}{4}$ ; alar. lin. 1—1 $\frac{1}{4}$ .)

*Var. β.* Purpureo-cupreus: tarsi læte flavi, apice fuscii.

Found near London.

*Mas.* Corpus sublineare, læve, nitens, parce hirtum: caput transversum, breve, convexum, juxta thoraci latum; vertex angustus; frons abrupte declivis: oculi sat magni: antennæ setacæ, hirtæ, corporis dimidio multo longiores; articulus 1<sup>us</sup> gracilis, sublinearis; 2<sup>us</sup> longicyathiformis; 3<sup>us</sup> et sequentes longi, lineares, usque ad 7<sup>um</sup> attenuati: thorax longiovatus, convexus: prothorax mediocris, transversus, antice angustior: mesothoracis scutum longitudine vix latius; parapsidum suturæ bene determinatæ; scutellum obconicum; metascutellum parvum, transversum: metathorax conspicuus: petiolus brevissimus: abdomen ovatum, planum, thorace brevius; segmentum 1<sup>um</sup> sat magnum, 2<sup>um</sup> et sequentia breviora: pedes mediocres, simplices, subæquales; tarsi articuli 1<sup>o</sup> ad 3<sup>um</sup> curtantes, 4<sup>us</sup> longior; ungues et pulvilli sat magni; protarsis articulus 1<sup>us</sup> brevissimus: alæ angustæ, breviter ciliatæ; nervus ulnaris humerali longior, radialis nullus, cubitalis crassus in alæ discum abrupte declivis, stigma minutum.

Sp. 17. Cirr. Coronis, Mas. *Viridis cupreo-varius, antennæ nigrae, pedes virides fulvo-cincti, alæ fuscæ.*

Viridis: oculi et ocelli rufi: antennæ nigrae; articuli 1<sup>us</sup> et 2<sup>us</sup> virides; thorax cupreo-varius: mesothoracis scutellum apice viridi micans: abdominis discus cupreus: pedes virides; trochanteres ferruginei; genua ferruginea; tarsi fulvi, apice fusci; protarsi fusci: alæ fuscæ; squamulæ piceæ; nervi picei. (Corp. long. lin.  $\frac{1}{3}$ — $\frac{1}{2}$ ; alar. lin.  $\frac{2}{3}$ — $\frac{3}{4}$ .)

*Var. β.* Cupreus: mesothoracis scutellum viride, basi cupreum: abdomen basi viride: meso- et metatarsi fusci, basi pallidiores.

*Var. γ.* Abdomen basi viridi-cyaneum.

*Var. δ.*—*Var. β.* similis: thorax viridis.

September; near London, Devonshire.

*Mas. C. Isææ* similis: caput thorace fere latius: antennæ subfiliformes, corporis dimidio longiores; articulus 1<sup>us</sup> longus, validus, fusiformis; 2<sup>us</sup> longicyathiformis; 3<sup>us</sup> latior, sublinearis; 4<sup>us</sup>, 5<sup>us</sup> et 6<sup>us</sup> angustiores, longitudine subæquales; 7<sup>us</sup> fusiformis, acuminatus, 6<sup>o</sup> angustior et paullo longior: prothorax conicus: mesothoracis parapsidum suturæ bene determinatæ, postice mutuo accedentes: abdomen longi-obconicum, subpetiolatum, thorace paullo brevius et angustius; segmentum 1<sup>um</sup> longum, angustum; 2<sup>um</sup> et sequentia brevia, transversa, subæqualia.

Sp. 18. Cirr. Lycomedes, Mas. *Cupreus viridi-varius, antennæ nigrae, pedes ænei, tarsi fusci, alæ subfusca.*

Cupreus: oculi et ocelli rufi: antennæ nigrae; articulus 1<sup>us</sup> nigro-æneus: gula fusca: metathorax viridis: abdomen nigro-cupreum, basi læte viride: sexualia fusca: pedes nigro-ænei; trochanteres et genua obscure rufa; tarsi fusci, apice obscuriores: alæ subfusca; squamulæ fusca; nervi fusci. (Corp. long. lin.  $\frac{1}{3}$ — $\frac{1}{2}$ ; alar. lin.  $\frac{1}{2}$ — $\frac{3}{4}$ .)

*Var. β.*—Thorax viridi-cupreus: scutellum apice viridi micans: abdomen basi viridi-æneum.

*Var. γ.*—Thorax læte viridis; discus cupreo-varius.

*Var. δ.*—Mesothoracis scutellum viride micans, basi cupreum.

*Var. ε.*—Scutellum purpureo-cupreum, apice aureum.

*Var. ζ.*—Abdomen omnino cupreum.

*Var. η.*—Scutellum apice cyaneo-viride.

*Var. θ.*—Thorax aureo-cupreus: abdomen nigro-viride, basi viride micans, cupreo-varium.

July, August; near London.

Sp. 19. Cirr. Orelia, Mas. *Viridis, abdomen cupreum, antennæ nigrae, pedes virides, tarsi fusci, alæ subfusca.*

Læte viridis, cyaneo-varius: oculi et ocelli rufi: antennæ nigrae; articuli 1<sup>us</sup> et 2<sup>us</sup> virides: abdomen nigro-cupreum, basi viride: pedes virides; trochanteres fulvi; genua fulva; tarsi fusci, basi fulvi: alæ subfusca; squamulæ fusca; nervi fusci.

Found near London.

*Fem.* Corpus longum, angustum, nitens, scitissime squameum, parce hirtum: caput transversum, breve, convexum, juxta thoraci latum; vertex

latus: oculi parvi: antennæ subfusiformes, latæ, corporis dimidio multo breviores; articulus 1<sup>us</sup> gracilis, sublinearis; 2<sup>us</sup> longicyathiformis; 3<sup>us</sup> et 4<sup>us</sup> approximati, subæquales; clava fusiformis, articulo 4<sup>o</sup> duplo longior: thorax longiovatus, fere planus: prothorax bene determinatus, transversus, antice angustior: mesothoracis scutum longitudine vix latius; parapsidum suturæ non bene determinatæ; scutellum obconicum: metathorax conspicuus: petiolus brevissimus: abdomen longiovatum, planum, thorace paullo brevius et angustius: pedes simplices; tarsis articuli 1<sup>o</sup> ad 3<sup>um</sup> curtantes, 4<sup>us</sup> longior; protarsis articulus 1<sup>us</sup> brevissimus: alæ angustæ; nervus ulnaris humerali longior, radialis nullus, cubitalis sat longus ad alæ apicem propensus; stigma parvum fingens.

Sp. 20. Cirr. Chabrias, Fem. *Viridis cupreo-variis, antennæ nigræ, abdomen cupreum, pedes virides albo-cincti, alæ albæ.*

Læte viridis cupreo-variis: oculi et ocelli rufi: antennæ nigræ; articuli 1<sup>us</sup> et 2<sup>us</sup> virides: abdomen supra cupreum: pedes virides; trochanteres picei; genua alba; tibiæ apice albæ; tarsi albi, apice fuscii; propedum tibiæ apice et subtus fulvæ, tarsi fuscii: alæ albæ; squamulæ fulvæ; nervi fulvi. (Corp. long. lin.  $\frac{3}{4}$ —1; alar. lin.  $1\frac{1}{4}$ — $1\frac{1}{2}$ .)

*Var. β.*—Thorax cyaneo-viridis: protibiæ fulvæ, apice et subtus flavæ; mesotarsi apice fulvi.

October: near London.

*Fem.* Corpus longum, angustum, sublineare, nitens, scitissime squameum, parce hirtum: caput juxta thoraci latum: oculi parvi, subrotundi, fere exstantes: antennæ clavatæ, corporis dimidio breviores; articulus 1<sup>us</sup> longus, validus, fusiformis; 2<sup>us</sup> longicyathiformis; 3<sup>us</sup> et 4<sup>us</sup> breves; clava longiovata, articulo 4<sup>o</sup> latior et plus duplo longior: thorax longiovatus, parum convexus: prothorax breviconicus, transversus, postice incurvus: mesothoracis scutum transversum, parapsides bene determinatæ, scutellum obconicum: metathorax brevis: abdomen longiovatum, depressum, thorace paullo longius et angustius: pedes graciles: alæ amplæ; nervus ulnaris humerali vix brevior, radialis brevissimus, cubitalis longus.

Sp. 21. Cirr. Clinias, Fem. *Cupreus viridi-variis, antennæ nigræ, pedes virides albo-cincti, alæ albidæ.*

Læte viridis, micans: oculi et ocelli rufi: antennæ nigræ; articulus 1<sup>us</sup> viridis: thoracis discus cupreus; abdomen supra læte cupreum: pedes virides; trochanteres piceii; genua albidæ; tibiæ apice albidæ; tarsi fulvi, basi albi, apice fuscii; propedum tibiæ fulvæ extus virides, tarsi pallide fuscii: alæ albidæ; squamulæ pallide fuscæ; nervi concolores. (Corp. long. lin.  $\frac{3}{4}$ ; alar. lin.  $1\frac{1}{2}$ .)

*Var. β.*—Caput supra læte cupreum: thoracis discus cupreus.

Found near London.

*Mas.* Corpus angustum, sublineare, læve, nitens, parce hirtum: caput transversum, breve, convexum, juxta thoraci latum; vertex angustus: oculi sat magni: antennæ subfiliformes, corporis dimidio multo longiores; articulus 1<sup>us</sup> gracilis, sublinearis; 2<sup>us</sup> longicyathiformis; 3<sup>us</sup> et 4<sup>us</sup> longi, lineares;

clava fusiformis, apice attenuata et acuminata, articulo 4° plus duplo longior non latior: thorax longiovatus, convexus: prothorax mediocris, transversus, antice angustior: mesothoracis scutum longitudine vix latius; parapsidum suturæ bene determinatæ; scutellum obconicum: metathorax conspicuus: abdomen ovatum, planum, thorace brevius: pedes simplices; tarsi articuli 1° ad 3<sup>um</sup> curtantes, 4<sup>us</sup> longior; protarsis articulus 1<sup>us</sup> brevissimus: alæ angustæ; nervus ulnaris humerali longior, radialis nullus, cubitalis crassus in alæ discum abrupte declivis.

*Fem.* Capitis vertex latus: oculi parvi: antennæ extrorsum crassiores, corporis dimidio paullo longiores; articuli 3<sup>us</sup> et 4<sup>us</sup> æquales; clava fusiformis, acuminata, articulo 4° duplo longior: abdomen thorace vix brevius.

Sp. 22. *Cirr.* Eudora, Mas et Fem. *Viridis aut cupreus, antennæ nigræ, pedes virides, tarsi fulvi, alæ limpidæ.*

*Mas.* Viridis: oculi et ocelli rufi: antennæ nigræ; articuli 1<sup>us</sup> et 2<sup>us</sup> virides: thoracis discus æneus: abdominis discus nigro-æneus: pedes virides; trochanteres fulvi; genua fulva; protarsi fuscii; meso- et metatarsi fulvi, apice fuscii: alæ sublimpidæ; squamulæ piceæ; nervi fuscii.

*Fem.* Viridi-æneus: antennis articuli 1<sup>us</sup> et 2<sup>us</sup> ænei: thoracis discus cupreus: abdomen viride cupreo-varium: pedes ænei: trochanteres rufi; tibiæ fuscæ, apice flavæ; tarsi flavii, apice fuscii; protarsi fulvi. (Corp. long. lin.  $\frac{1}{3}$ — $\frac{2}{3}$ ; alar. lin.  $\frac{1}{2}$ — $\frac{2}{3}$ .)

*Var. β. Mas.*—Thorax cyaneo-viridis: scutelli discus cupreus: tibiæ fuscæ.

*Var. γ. Mas.*—Thorax cyaneo-viridis cupreo-varius: abdomen basi viridi-cyaneum.

*Var. δ. Mas.*—Cupreus: meso- et metatarsi fuscii.

*Var. ε. Fem.*—Tibiæ æneæ, apice et basi fulvæ; protarsi fuscii; meso- et metatarsi fulvi, apice fuscii.

*Var. ζ. Fem.*—*Var. ε.* similis: caput viride: thorax cupreus: abdomen viridi-cupreum.

*Var. η. Fem.*—*Var. ζ.* similis: scutellum apice viride.

*Var. θ. Fem.*—Cupreus: caput et abdomen cupreo-viridia: tibiæ æneæ; meso- et metatarsi fuscii, basi fulvi.

*Var. ι. Fem.*—*Var. ε.* similis: thorax æneo-viridis: abdomen nigro-æneum, basi et apice viride.

*Var. κ. Fem.*—*Var. θ.* similis: corpus omnino cupreum.

Found near London.

*Mas.* Corpus sublineare, læve, nitens, parce hirtum: caput transversum, breve, convexum, juxta thoraci latum; vertex angustus: oculi sat magni: antennæ subsetaceæ, corporis dimidio multo longiores; articulus 1<sup>us</sup> gracilis, sublinearis; 2<sup>us</sup> longicyathiformis; 3<sup>us</sup> et sequentes ad 5<sup>um</sup> fere æquales; clava longifusiformis, apice attenuata et acuminata, articulo 5° plus duplo longior: thorax longiovatus, convexus: prothorax mediocris, transversus, antice angustior: mesothoracis scutum longitudine vix latius; parapsidum suturæ bene determinatæ; scutellum obconicum: metathorax conspicuus: petiolus brevissimus: abdomen ovatum, planum, thorace brevius: pedes simplices; tarsi articuli 1° ad 3<sup>um</sup> curtantes, 4<sup>us</sup> longior; protarsis articulus

1<sup>us</sup> brevissimus: alæ angustæ; nervus ulnaris humerali longior, radialis nullus, cubitalis crassus, in alæ discum abrupte declivis.

Sp. 23. Cirr. Procles, Mas. *Æneo-viridis*, abdomen nigro-cupreum, antennæ nigræ, pedes virides, tarsi fusci, alæ sublimpidæ.

*Æneo-viridis*: oculi et ocelli rufi: antennæ nigræ; articuli 1<sup>us</sup> et 2<sup>us</sup> viridicænei: abdomen nigro-cupreum: pedes virides; trochanteres ferruginei; gena ferruginea; protarsi obscure fulvi: meso- et metatarsi fusci, basi et subtus fulvi: alæ sublimpidæ, squamulæ picæ; nervi fusci. (Corp. long. lin.  $\frac{2}{3}$ ; alar. lin.  $\frac{3}{4}$ .)

Found near London.

*Mas.* Corpus sublineare, nitens, læve, parce hirtum: caput transversum, breve, convexum, juxta thoraci latum; vertex latus: oculi parvi: antennæ subfiliformes, hirtæ, corporis dimidio multo longiores; articulus 1<sup>us</sup> gracilis, sublinearis; 2<sup>us</sup> longicyathiformis; 3<sup>us</sup> et sequentes longi, lineares; clava fusiformis, apice attenuata et acuminata: thorax longiovatus, convexus: prothorax mediocris, transversus, antice angustior: mesothoracis scutum longitudine vix latius; parapsidum suturæ bene determinatæ; scutellum obconicum: metathorax conspicuus: petiolus brevissimus: abdomen ovatum, planum, thorace brevius: pedes mediocres, simplices, subæquales; tarsi articuli 1<sup>o</sup> ad 3<sup>um</sup> curtantes, 4<sup>us</sup> longior; ungues et pulvilli sat magni; protarsis articulus 1<sup>us</sup> brevissimus: alæ angustæ; nervus ulnaris humerali longior, radialis nullus, cubitalis crassus, in alæ discum abrupte declivis.

Sp. 24. Cirr. Abastor, Mas. *Viridis*, abdomen cupreum, antennæ nigræ, pedes ferruginei, femora viridia, alæ fuscæ.

*Læte viridis*: oculi et ocelli rufi: antennæ nigræ; articuli 1<sup>us</sup> et 2<sup>us</sup> nigro-virides: abdomen nigro-cupreum; basi viride micans: pedes ferruginei; coxæ virides; trochanteres fusci, apice et basi flavi; femora viridia, apice flava; tarsi apice fusci; protarsi pallide fusci: alæ fuscæ; squamulæ supra virides; nervi fusci. (Corp. long. lin.  $\frac{1}{2}$ ; alar. lin.  $\frac{3}{4}$ .)

Found near London.

*Fem.* Corpus sublineare, nitens, scitissime squameum, parce hirtum: caput transversum, breve, convexum, juxta thoraci latum; vertex angustus; frons abrupte declivis: oculi sat magni: antennæ clavatæ, corporis dimidio paullo longiores; articulus 1<sup>us</sup> gracilis, sublinearis; 2<sup>us</sup> longicyathiformis; 4<sup>us</sup> 3<sup>o</sup> brevior; clava longiovata, acuminata, articulo 4<sup>o</sup> duplo longior: thorax ovatus, convexus: prothorax brevis, antice angustior: mesothoracis scutum longitudine vix latius: parapsidum suturæ bene determinatæ; scutellum obconicum; metascutellum parvum, transversum: metathorax conspicuus: petiolus brevissimus: abdomen ovatum, planum, thorace vix brevius; segmentum 1<sup>um</sup> sat magnum, 2<sup>um</sup> et sequentia breviora: pedes mediocres, simplices, subæquales; tarsi articuli 1<sup>o</sup> ad 3<sup>um</sup> curtantes, 4<sup>us</sup> longior; ungues et pulvilli sat magni; protarsis articulus 1<sup>us</sup> brevissimus: alæ angustæ, breviter ciliatæ; nervus ulnaris humerali longior, radialis nullus, cubitalis crassus in alæ discum abrupte declivis, stigma minutum.

Sp. 25. Cirr. Aratus, Fem. *Viridis cupreo-varius*, antennæ nigræ, pedes flavi, femora viridia, alæ sublimpidæ.

Læte viridis : oculi et ocelli rufi : antennæ nigræ ; articulus 1<sup>us</sup> nigro-viridis : thoracis discus cupreo-varius ; mesothoracis scutellum cupreum : abdominis discus cupreo-viridis ; pedes flavi ; coxæ virides ; femora viridia, apice flava ; tarsi apice fuscii ; protibiæ extus fulvæ ; protarsi fuscii : alæ sublimpidæ ; squamulæ fulvæ ; nervi fulvi. (Corp. long. lin.  $\frac{1}{2}$ — $\frac{3}{4}$  ; alar. lin.  $\frac{3}{4}$ —1.)

*Var. β.*—Caput postice cupreum : scutellum apice viride micans : abdominis discus cupreus.

*Var. γ.*—Meso- et metatibiæ fulvæ.

*Var. δ.*—Caput cupreo-varium : thoracis discus cupreus ; abdomen viride ; segmenta basi cuprea.

*Var. ε.*—Pro- et mesopedum tibiæ pallide fuscæ : metatibiæ fulvæ : meso- et metatarsi fulvi, apice fuscii.

*Var. ζ.*—*Var. ε.* similis : tibiæ omnes fulvo-fuscæ.

June, near London.

*Fem.* Corpus sublineare, læve, nitens, parce hirtum : caput transversum, breve, convexum, juxta thoraci latum, vertex angustus : oculi sat magni : antennæ subsetacæ, corporis dimidii vix longitudine ; articulus 1<sup>us</sup> gracilis, sublinearis ; 2<sup>us</sup> longicyathiformis ; 3<sup>us</sup> et sequentes longi, lineares, usque ad 7<sup>um</sup> decrescentes : thorax longiovatus, convexus : prothorax mediocris, transversus, antice angustior : mesothoracis scutum longitudine vix latius ; parapsidum suturæ bene determinatæ ; scutellum obconicum : metathorax conspicuus : petiolus brevissimus : abdomen ovatum, planum, thorace latius, vix brevius : pedes simplices ; tarsis articuli 1<sup>o</sup> ad 3<sup>um</sup> curtantes, 4<sup>us</sup> longior ; protarsis articulus 1<sup>us</sup> brevissimus : alæ angustæ ; nervus ulnaris humerali longior, radialis nullus, cubitalis brevis ad alæ apicem propensus.

Sp. 26. *Cirr. Lagus, Fem. Cupreus viridi-varius, antennæ nigræ, pedes ænei, tarsi flavi, alæ limpide.*

Cupreus : oculi et ocelli rufi : antennæ nigræ ; articuli 1<sup>us</sup> et 2<sup>us</sup> virides : mesothoracis scutellum apice viride ; abdominis discus viridi-cyaneus : pedes ænei ; trochanteres ferruginei ; genua ferruginea ; tibiæ æneo-piceæ, apice flavæ ; tarsi flavi, apice fuscii ; protarsi pallide fuscii : alæ limpide ; squamulæ piceæ ; nervi pallide fuscii. (Corp. long. lin.  $\frac{1}{2}$ — $\frac{3}{4}$  ; alar. lin.  $\frac{3}{4}$ —1.)

*Var. β.*—Thorax viridis ; discus cupreus : abdomen viride, cupreo varium.

*Var. γ.*—*Var. β.* similis : abdomen supra cupreum.

*Var. δ.*—Viridis : abdominis discus nigro-æneus.

*Var. ε.*—*Var. β.* similis : mesothoracis scutellum læte cupreum.

*Var. ζ.*—Læte viridis cupreo-varius : scutellum et abdomen cuprea : genua pallide flava ; tibiæ fulvæ, apice flavæ.

*Var. η.*—*Var. ζ.* similis : abdomen viride ; discus cupreus.

*Var. θ.*—Cupreus : antennis articuli 1<sup>us</sup> et 2<sup>us</sup> cuprei ; abdominis discus nigro-cupreus.

August ; near London.

*Var. ι.*—Nigro-cupreus : antennis articulus 1<sup>us</sup> nigro-æneus : abdomen æneo-cupreum ; discus nigro-æneus : pedes fulvi ; coxæ nigro-æneæ ; femora nigro-ænea ; tibiæ fuscæ, apice et basi fulvæ ; tarsi apice fuscii.

August ; near London.